

Remarks

Claims 1-10 are currently pending. Claim 1 has been amended to further define the aqueous composition. No new matter has been added.

35 U.S.C. §§ 103

The Examiner rejected claims 1, 2 and 4-10 under 35 U.S.C. § 103(a) as being unpatentable over Donenfeld (U.S. Pat. No. 4,576,610) in view of Fukui et al. (U.S. Pat. No. 5,529,586) and claim 3 as being unpatentable over Donenfeld in view of Fukui et al. and further in view of Yamane et al. (U.S. Pat. No. 4,210,412). The Examiner has also rejected claims 1, 5, 6 and 8-10 as being unpatentable over Dien (U. S. Pat. No. 3,510,241) in view of Kimbrell (U.S. Pat. No. 6,113,656), or in the alternative over Fukui et al. in view of Dien and further in view of Kimbrell and claim 2 as being unpatentable over Dien in view of Kimbrell and further in view of Fukui et al. Applicant respectfully traverses these rejections for the following reasons.

As currently presented, claim 1 recites a method of dyeing or printing cellulose-containing fibre material using a disperse dye, which comprises treating the fibre material according to an exhaust method or pad-dyeing method with an aqueous composition comprising a water-soluble polyester resin and a water-soluble or water-dispersible acrylate binder.

In comparison, Donenfeld discloses a sublimation dye transfer printing method utilizing a dye bonding composition containing a polyester resin. Although the polyester resins taught in Donenfeld preferably have free carboxyl groups, they also contain a long polymer chain that is hydrophobic. Therefore, the carboxyl groups located at the termini of the polymer chain would not be sufficient to render the polyester resins water soluble.

Additionally, the dye bonding composition containing the polyester resin is coated onto release paper through a screen; thus, water-solubility of the polyester resin in Donenfeld would not be desired.

Adding the teachings of Fukui et al. or Yamane et al. to Donenfeld does not bring one skilled in the art closer to Applicant's claimed invention. Fukui et al. teach the use of certain dyes as disperse dyes while Yamane et al. generally teach cross linking agents useful in a dye transfer printing method. Neither publication teaches or suggests the use of water soluble polyester resins in an exhaust method or pad-dyeing method.

The Examiner notes Dien does not teach the use of polyester resins in its method and has added the teachings of Kimbrell. In particular, Kimbrell teaches the use of "Leveler 550, a polyester resin dispersion." *See U.S. Pat. No. 6,113,656 at col. 8, lines 9-10.* One of ordinary skill in the art would conclude from this passage that a "polyester resin dispersion" is not water soluble. Adding Fukui et al. to Dien and Kimbrell also does not lead one to the present invention for the reasons set forth above.

Thus, one of ordinary skill in the art, when reading each cited publication as a whole, would not have expected substituting a water soluble polyester resin for a dispersible polyester resin in an exhaust or padding method would yield a predictable result with respect to dyeings achieved by a disperse dye. Nevertheless, as stated in the present application and demonstrated in the Examples of the present application, Applicant has surprisingly found that by combining (i) the treatment of cellulose-containing fibre materials by an aqueous composition containing a water soluble polyester resin and acrylate binder with (ii) a method according to an exhaust or padding method renders the cellulose component and fibre material dyeable by one class of dyes

(disperse dyes). Furthermore, the dyeings or prints obtained according to the invention have very good fastness to light and good wet-fastness properties, such as fastness to washing, to water, to seawater, to cross-dyeing and to perspiration. Neither Donenfeld, Fukui et al., Yamane et al., Dien nor Kimbrell teach or suggest such an unpredictable result. Accordingly, Applicant respectfully requests the rejections under § 103(a) be withdrawn and the issuance of a Notice of Allowance toward the pending claims.

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Respectfully Submitted,

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